SNPLMA Project #: _____ **(To be assigned by SNPLMA Administration)**

TAHOE SCIENCE AND RESEARCH PROJECTS
ESTIMATED DIRECT COSTS & KEY MILESTONE DATES

Project Name: Tahoe Yellow Cress Strategy Implementation

Sponsoring Agency: U.S. Forest Service, LTBMU

Date: March 10, 2004

Contact: Shana Gross

Phone: 550-543-2788

EIP # 10159

Identify estimated costs of eligible reimbursement expenses:

1. Planning and Research Costs BA/BEs, Annual Interagency Surveys, Monitoring and Annual Reports	$ 25,320	25.3 %
2. Direct Project Labor (Payroll, fringe benefits, etc.)	$ 20,181	20.2 %
3. Equipment Fencing, TYC plants, rental vehicles	$ 18,926	19.0 %
4. Travel out of Basin, per diem (none)	$ 0	0.0 %
5. Project Contracts, Grants and Agreements Genetics Lab contract	$ 30,395	30.4 %
6. Project Administration contract prep & admin	$ 5,000	5.0 %
7. Other (Explain)	$ 0	0.0 %
8. Contingency Reserve (Not to exceed 10%)	$ 0	0.0 %
TOTAL:	$ 100,000	100.0 %

Estimated Key Milestone Dates:

Milestones:	Date:	Estimated Costs
BE/BA completed for 2004 outplanting efforts	April 30, 2004	$ 4,110
Build protective structures & plant TYC inside	June 30, 2004	$ 13,690
2004 Interagency Annual Survey	Sept 30, 2004	$ 4,050
Complete genetics contract preparation	Sept 30, 2004	$ 1,000
2004 monthly monitoring TYC plants completed	Nov 30, 2004	$ 2,375
2004 monitoring data entry completed	Feb 28, 2005	$ 825
BE/BA completed for 2005 outplanting efforts	April 30, 2005	$ 4,110
Build protective structures & plant TYC inside	June 30, 2005	$ 13,690
2004 Annual Report	June 30, 2005	$ 2,125
2005 Interagency Annual Survey	Sept 30, 2005	$ 4,050
2005 monthly monitoring TYC plants completed	Nov 30, 2005	$ 2,375
2005 monitoring data entry completed	Feb 28, 2006	$ 825
2005 Annual Report	June 30, 2006	$ 2,125
All other direct project labor April 04 – June 06	June 30, 2006	$10,255

Completion of genetics contract work	Sept 30, 2007	$ 30,395
Genetics contract admin. Sept 04 – Sept 07	Sept 30, 2007	$ 4,000

COMMENTS: The Tahoe Yellow Cress Strategy calls for continuation of the experimental program and monitoring components for at least eight years, to allow exposure of the reintroduced populations to a full range of environmental variation. The experimental program started in 2003 and will run through 2011. Funding for fieldwork in FY06 and beyond will be requested from SNPLMA in the FY05 round.

SNPLMA Project #: _____ **(To be assigned by SNPLMA Administration)**

TAHOE PROJECT PROPOSAL

Project Name: Implementation of Tahoe Yellow Cress Strategy **EIP # 10159**

Lead Agency: USFS-LTBMU

Contact: Shana Gross

Phone Number: 530-543-2788

Threshold: V-3 Sensitive Plants

Email Address:

Threshold Standard: Maintain minimum number of populations sites for each sensitive plant species (26 for Tahoe Yellow Cress)

Total Project Cost: $100,000

Project Description:

Two sites on Forest Service System lands have been previously selected for the reintroduction of Tahoe yellow cress (TYC) plants; the plants have been growing in nurseries during the past year. A total of 600 plants will be outplanted at Baldwin Beach, within a fenced area that was outplanted in 2003. A total of 500 plants will be outplanted at Nevada Beach in a new enclosure, which will be located adjacent to the existing one. The plants will be monitored monthly to determine their phenological growth and to see if disturbance occurs. During 2003 TYC was outplanted at Zephyr Cove, these plants will also be monitored on a monthly basis. During the first week of September, 2004, an interagency Basin-wide annual survey will be conducted. The Forest Service will survey the National Forest System lands to monitor naturally-occurring populations of TYC. A genetics study, in collaboration with TRPA and the FS Genetics Lab in Placerville, will be conducted to address specific questions about TYC.

Describe the purpose and need for the project:

As of the fall of 2002, TYC was listed as California State as Endangered, in Nevada as Critically Endangered, and federally as a Candidate species. This species is on TRPA's Special Interest Species List, with a total of 26 occurrences to be maintained. TYC is an endemic species of Lake Tahoe Basin. In 2002, more than a dozen agencies signed a TYC Conservation Strategy and Cooperating Agreement. The Strategy provides direction for the conservation and management of TYC, with the goal of increasing TYC populations to the extent that federal listing of the species will never be necessary. The TYC Strategy outlines goals to protect, improve, promote, monitor and implement an adaptive management framework for the species. This includes both protection of existing populations and outplanting of new populations.

Describe the goals and objective of the project (for Science & Research Projects describe Key Management Questions being addressed):

The overall goal of this project is to improve TYC populations and management, ultimately restoring the populations to a self-sustaining metapopulation dynamic.

This project helps specifically meet conservation Goals 2, 4, and 5 of the TYC Conservation Strategy. Goal 2 calls for the improvement of the size and persistence of TYC populations at core and priority restorations sites. The objective of Goal 4 is to conduct work that directly supports management and restoration. Goal 5 calls for the continuation of monitoring TYC populations.

The results of the proposed genetics laboratory work will be used in developing a refined reintroduction strategy for this species, which will serve as sideboards for future research designs and management decisions.

The Key Management Questions that we hope to answer are:

- Can TYC populations be created or enlarged in order to restore the self-sustaining dynamics of the species?
- Can any TYC genotype or gene pool perform equally well at any appropriate site?

Describe the anticipated project accomplishments:

The anticipated project accomplishment is to learn enough about Tahoe Yellow Cress's ecological requirements to improve Tahoe Yellow Cress populations and management, ultimately restoring a self-sustaining metapopulation dynamic.

Describe the "readiness" of this project to move forward (Environmental documentation, etc.)

BE/BA for outplanting is currently being worked on. The necessary crew to complete 2004 part of the reintroduction and annual survey is established. Genetics contract work is still being discussed.

Describe partnerships for this project. (Include documentation)

The following agencies signed the TYC conservation strategy and have been working in an interagency group to fulfill the agreement:

- Tahoe Regional Planning Agency
- US Forest Service - Lake Tahoe Basin Management Unit
- US Fish and Wildlife Service
- Nevada Division of State Parks
- Nevada Division of State Lands
- Nevada Division of Forestry
- Nevada Natural Heritage Program
- California Department of Fish and Game
- California Department of Parks and Recreation
- California Tahoe Conservancy
- California State Lands Commission
- League to Save Lake Tahoe
- Tahoe Lakefront Owners Association

Additionally, BMP Ecosciences, a private company, has been in the forefront with the

design and implementation of TYC outplanting.

For Science & Research Projects describe how this project will guide future management activities:

This project will provide sufficient information so that managing agencies can determine individual site protection and conservation needs.

Include an 8 ½ X 11 map depicting the project, or research/study area.


Tahoe Yellow Cress Implementation Outplanting Study Locations
EIP #379
Zephyr Cove
Nevada Beach
Baldwin Beach
3
0
3
6 Miles
N